

RANKING SCORE (TOTAL POINTS) : 0

Date Remediation Started: 5/20/96 Date Completed: 5/22/96

Remediation Method: Excavation ☒ Approx. Cubic Yard 509

(Check all appropriate sections)

Landfarmed ☒ Amount Landfarmed (cubic yds) 359

Other

Remediation Location: Onsite ☒ Offsite

(i.e., landfarmed onsite, name and location of offsite facility)

Backfill Material Location:

General Description of Remedial Action:

Excavated contaminated soil to pit size 18'x19'x25' and landfarmed soil onsite within a bermed area at a depth of 6" to 12" deep. Soil will be aerated by plowing/disking until soil meets regulatory levels.

*** Vertical extent at 25' provided BTEX at .0934 ppm; TPH was not detected. Bedrock was encountered at 25'. See attached risk analysis form and lab analysis.

Ground Water Encountered: No ☒ Yes Depth

Final Pit Closure Sampling:

Sample Location 5 pt composite- 4 side walls and pit bottom

(if multiple samples, attach sample result and diagram of sample locations and depths.)

Sample depth 25'

Sample date 5/21/96 Sample time 1:00:00 PM

Sample Results

Benzene (ppm) 0.2916

Total BTEX (ppm) *** 59.1754

Field headspace (ppm)

TPH 235.30 Method 418.1

Vertical Extent (ft) 25' Risk Assessment form attached Yes ☒ NoGround Water Sample: Yes No ☒ (If yes, see attached Groundwater Site Summary Report)

I HEREBY CERTIFY THAT THE INFORMATION ABOVE IS TRUE AND COMPLETE TO THE BEST OF MY KNOWLEDGE AND MY BELIEF

DATE April 28, 1997

SIGNATURE

PRINTED NAME AND TITLE Denver Bearden
Administrator III



Well Name:	Pierce #2A
Well Legals:	Unit E, Sec 30, T31N, R10W
Pit Type:	Dehydrator
Horizontal Distance to Surface Water:	Greater than 1,000 ft
Groundwater Depth:	Greater than 100 ft

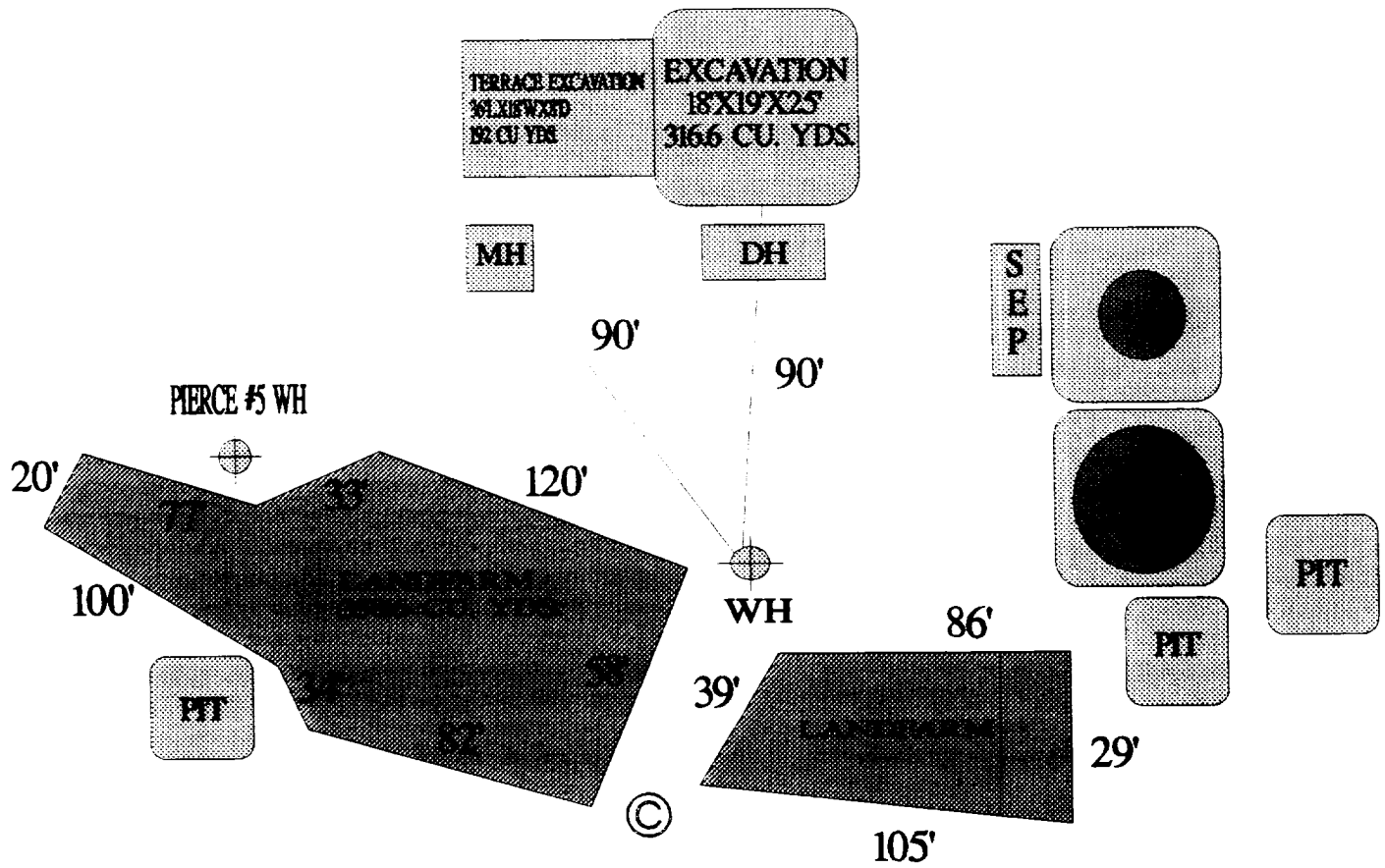
RISK ANALYSIS

PNM requests closure of the Pierce #2A using a limited risk analysis of the site conditions.

1. PNM estimated groundwater to be at a depth of 120 ft. based upon elevation of site to the Animas River. (Reference: topographic map.)
2. This site is not located within 200 ft. of a domestic water well and is not within 1,000 ft. of any other water source.
3. Distance from the site to surface water is greater than 1,000 ft.
4. PNM excavated 509 cu. yds. from the former pit. Vertical extent was determined using a hollow stem drilling rig. Bedrock was encountered at 25 ft. below ground surface.

Based upon the information provided above, PNM believes the Pierce #2A poses minimal risk to the environment. Subsurface lateral migration is limited based upon PNM's past experience in excavating 400 pits. Source removal minimizes the possibility of surface water contamination. Bedrock provides an impermeable layer between remaining contamination and groundwater. Vertical migration through bedrock to groundwater is highly unlikely.

PIERCE #2A EXCAVATION
05/21/96



OFF: (505) 325-8786



LAB: (505) 325-5667

Diesel Range Organics

Attn: *Denver Bearden*
Company: *PNM Gas Services*
Address: *603 W. Elm*
City, State: *Farmington, NM 87401*

Date: *22-May-96*
COC No.: *4685*
Sample No. *10966*
Job No. *2-1000*

Project Name: *PNM Gas Services - Pierce 2A*
Project Location: *9605211300; Excavation Composite Sample*
Sampled by: *RH* Date: *21-May-96* Time: *13:00*
Analyzed by: *DC* Date: *22-May-96*
Sample Matrix: *Soil*

Laboratory Analysis

<i>Parameter</i>	<i>Result</i>	<i>Unit of Measure</i>	<i>Detection Limit</i>	<i>Unit of Measure</i>
<i>Diesel Range Organics (C10 - C28)</i>	<i>235.3</i>	<i>mg/kg</i>	<i>5.0</i>	<i>mg/kg</i>

Quality Assurance Report

DRO QC No.: 0475-QC

Calibration Check

<i>Parameter</i>	<i>Method Blank</i>	<i>Unit of Measure</i>	<i>True Value</i>	<i>Analyzed Value</i>	<i>% Diff</i>	<i>Limit</i>
<i>Diesel Range (C10 - C28)</i>	<i><5.0</i>	<i>ppm</i>	<i>2,000</i>	<i>2,020</i>	<i>1.0</i>	<i>15%</i>

Matrix Spike

<i>Parameter</i>	<i>1 - Percent Recovered</i>	<i>2 - Percent Recovered</i>	<i>Limit</i>	<i>%RSD</i>	<i>Limit</i>
<i>Diesel Range (C10-C28)</i>	<i>117</i>	<i>106</i>	<i>(70-130)</i>	<i>7</i>	<i>20%</i>

Method - SW-846 EPA Method 8015A mod. - Nonhalogenated Volatile Hydrocarbons by Gas Chromatography

Approved by: *Ja4*
Date: *5/22/96*

P. O. BOX 2606 • FARMINGTON, NM 87499

- TECHNOLOGY BLENDING INDUSTRY WITH THE ENVIRONMENT -

OFF: (505) 325-8786



LAB: (505) 325-5667

AROMATIC VOLATILE ORGANICS

Attn: *Denver Bearden*
Company: *PNM Gas Services*
Address: *603 W. Elm*
City, State: *Farmington, NM 87401*

Date: *22-May-96*
COC No.: *4685*
Sample No. *10966*
Job No. *2-1000*

Project Name: *PNM Gas Services - Pierce 2A*
Project Location: *9605211300; Excavation Composite Sample*
Sampled by: *RH* Date: *21-May-96* Time: *13:00*
Analyzed by: *DC* Date: *22-May-96*
Sample Matrix: *Soil*

Aromatic Volatile Organics

Component	Result	Units of Measure	Detection Limit	Units of Measure
<i>Benzene</i>	<i>291.6</i>	<i>ug/kg</i>	<i>0.2</i>	<i>ug/kg</i>
<i>Toluene</i>	<i>1308.7</i>	<i>ug/kg</i>	<i>0.2</i>	<i>ug/kg</i>
<i>Ethylbenzene</i>	<i>3434.1</i>	<i>ug/kg</i>	<i>0.2</i>	<i>ug/kg</i>
<i>m,p-Xylene</i>	<i>42781.0</i>	<i>ug/kg</i>	<i>0.2</i>	<i>ug/kg</i>
<i>o-Xylene</i>	<i>11360.1</i>	<i>ug/kg</i>	<i>0.2</i>	<i>ug/kg</i>
	<i>TOTAL</i>	<i>59175.4</i>		<i>ug/kg</i>

Method - *SW-846 EPA Method 8020 Aromatic Volatile Organics by Gas Chromatography*

Approved by: *Jag*
Date: *5/22/96*

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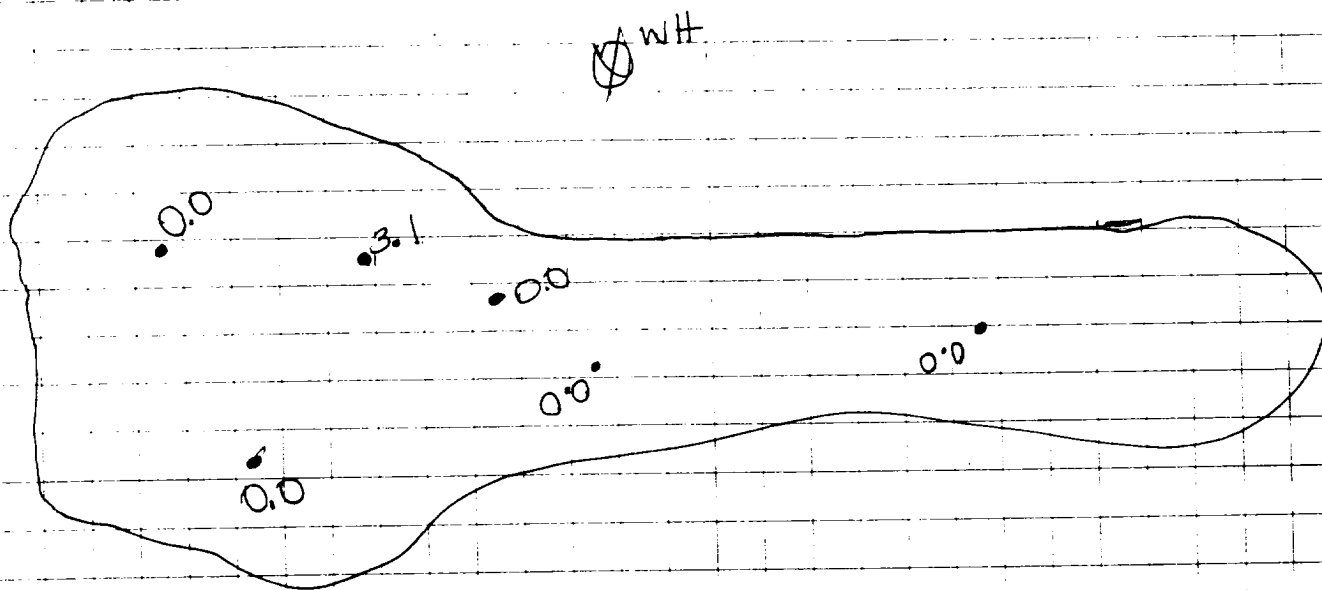
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Pierce #2A Landfarm

7-2-96

Composite Sample 9607021100

Soil Vapor Reading 19.8



Sample Depth 2' - 12' deep.

OFF: (505) 325-5667



LAB: (505) 325-1556

Diesel Range Organics

Attn: *Denver Bearden*
Company: *PNM Gas Services*
Address: *603 W. Elm*
City, State: *Farmington, NM 87401*

Date: *10-Jul-96*
COC No.: *4704*
Sample No. *11392*
Job No. *2-1000*

Project Name: *PNM Gas Services - Pierce 2A Landfarm*
Project Location: *9607021100; 6pt. Composite, 2"-12" deep*
Sampled by: *GC* Date: *2-Jul-96* Time: *11:00*
Analyzed by: *DC* Date: *9-Jul-96*
Sample Matrix: *Soil*

Laboratory Analysis

<i>Parameter</i>	<i>Result</i>	<i>Unit of Measure</i>	<i>Detection Limit</i>	<i>Unit of Measure</i>
<i>Diesel Range Organics (C10 - C28)</i>	<i><5.0</i>	<i>mg/kg</i>	<i>5.0</i>	<i>mg/kg</i>

Quality Assurance Report

DRO QC No.: 0475-QC

Calibration Check

<i>Parameter</i>	<i>Method Blank</i>	<i>Unit of Measure</i>	<i>True Value</i>	<i>Analyzed Value</i>	<i>% Diff</i>	<i>Limit</i>
<i>Diesel Range (C10 - C28)</i>	<i><5.0</i>	<i>ppm</i>	<i>2,000</i>	<i>1,960</i>	<i>2.0</i>	<i>15%</i>

Matrix Spike

<i>Parameter</i>	<i>1 - Percent Recovered</i>	<i>2 - Percent Recovered</i>	<i>Limit</i>	<i>%RSD</i>	<i>Limit</i>
<i>Diesel Range (C10-C28)</i>	<i>117</i>	<i>112</i>	<i>(70-130)</i>	<i>3</i>	<i>20%</i>

Method - SW-846 EPA Method 8015A mod. - Nonhalogenated Volatile Hydrocarbons by Gas Chromatography

Approved by: *[Signature]*
Date: *7/10/96*

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- TECHNOLOGY BLENDING INDUSTRY WITH THE ENVIRONMENT -

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8015 Modified Nonhalogenated Volatile Organics Total Petroleum Hydrocarbons

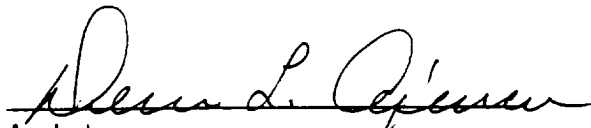
Client:	Public Service Co. of NM	Project #:	93108-02
Sample ID:	Pierce #2A TH-4 @ 25'	Date Reported:	12-05-96
Laboratory Number:	A802	Date Sampled:	12-04-96
Chain of Custody No:	5023	Date Received:	12-04-96
Sample Matrix:	Soil	Date Extracted:	12-05-96
Preservative:	Cool	Date Analyzed:	12-05-96
Condition:	Cool and Intact	Analysis Requested:	8015 TPH

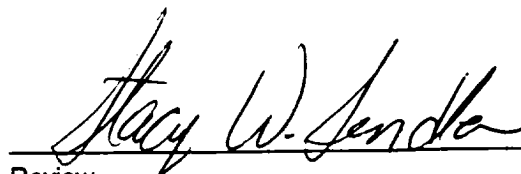
Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	ND	0.2
Diesel Range (C10 - C28)	ND	0.1
Total Petroleum Hydrocarbons	ND	0.2

ND - Parameter not detected at the stated detection limit.

References: Method 8015, Nonhalogenated Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, July 1992.

Comments:


Analyst


Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8020 AROMATIC VOLATILE ORGANICS

Client:	Public Service Co. of NM.	Project #:	93108-02
Sample ID:	Pierce #2A TH-4 @ 25'	Date Reported:	12-05-96
Laboratory Number:	A802	Date Sampled:	12-04-96
Chain of Custody:	5023	Date Received:	12-04-96
Sample Matrix:	Soil	Date Analyzed:	12-05-96
Preservative:	Cool	Date Extracted:	12-05-96
Condition:	Cool & Intact	Analysis Requested:	BTEX

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)
Benzene	ND	8.8
Toluene	22.3	8.4
Ethylbenzene	10.4	7.6
p,m-Xylene	51.1	10.8
o-Xylene	9.6	5.2
Total BTEX	93.4	

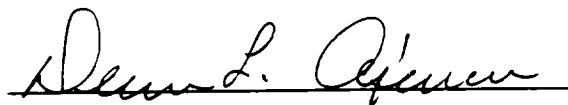
ND - Parameter not detected at the stated detection limit.

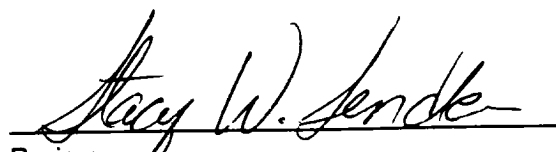
Surrogate Recoveries:	Parameter	Percent Recovery
	Trifluorotoluene	100 %
	Bromofluorobenzene	101 %

References: Method 5030, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA, July 1992.

Method 8020, Aromatic Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, Sept. 1994.

Comments:


Analyst


Review